

well as endogenous factors such as obesity or hormonal disorders.

A conception closely associated in time with ovulation has been suggested to result in more boys.⁵ A high frequency of sexual intercourse should, according to this hypothesis, lead to a predominance of boys and a decline in the sex ratio according to age or parity could reflect a decline in sexual activity by age or a change in endogenous hormones over time.⁶ A low frequency could furthermore lead to low fecundity.

A recent study showed that conception cycles with a short follicular phase produced more boys than girls.⁷ Exposures like dibromochloropropane (DBCP) have been shown to be associated with both low fecundity and a low sex ratio.² De Cock *et al* found a difference in the time to pregnancy for boys and girls with the shortest time to pregnancy for the boys.⁸ These observations indicate a link between fecundity as measured by time to pregnancy and sex ratio.

Based upon these observations we report data on sex ratio (measured as the proportion of boys among all newborns). It was expected that the sex ratio would decline with body mass index, age, parity, and low fecundity.

The analyses are based upon data from a community trial named "Healthy habits for two" conducted between 1984 and 1987. All pregnant women in the Danish cities Odense and Aalborg were asked to give detailed information on lifestyle factors during pregnancy and obstetrical information on delivery was recorded from the medical files.⁹ The study subjects constituted 10 042 pregnant women (singletons only) after excluding 1808 women (15.26 %) with incomplete data.

The participants delivered 5137 boys and 4905 girls (sex ratio = 0.51). Table 1 shows a weak but not significant trend towards a lower sex ratio with increasing age (except

for women over 40 years of age) and increasing parity. No association was found between body mass index and the sex ratio.

The only significant association was a lower sex ratio among couples with a time to pregnancy of more than 12 months (table 2). After entering all the variables into a logistic regression model with the sex ratio as the outcome only infertility remained significantly associated with a low sex ratio with an odds ratio (OR) for having a boy of 0.874 (95% confidence interval (95% CI) 0.789 to 0.968).

The reason for the low sex ratio in some couples with low fecundity could be due to the same hormonal imbalance that causes the infertility or low sexual activity in couples who can be treated by hormones. Future studies should be able to discriminate between these possible factors.

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Table 1 Maternal characteristics and sex ratio of offspring

	Sex ratio	Offspring (n)	P value (χ^2 test for trend)
Maternal age:			
15-19	0.483	259	
20-24	0.522	2652	
25-29	0.510	4307	
30-34	0.510	2123	
35-39	0.493	629	
40-45	0.542	72	0.480
Maternal body mass index (kg/m ²):			
15-19	0.502	3084	
20-24	0.517	5705	
25-29	0.512	970	
> 30	0.502	283	0.462
Maternal parity:			
0	0.515	4899	
1	0.511	3867	
2	0.500	1060	
3-5	0.486	216	0.263

Table 2 Time to pregnancy and sex ratio at birth

Time to pregnancy	Boy (n)	Girl (n)	Sex ratio	P value χ^2 test
0-6 months	3788	3528	0.518	
7-12 months	479	449	0.516	
> 1y	870	928	0.484	P = 0.035

χ^2 Test for trend: sex ratio P = 0.015

CRC Handbook of Chemistry and Physics, 76th edition. Edited by DAVID R LIDE. (Price £79.) 1995. Boca Raton, Florida: CRC Press. ISBN 0-8493-0476-8.

Some years ago, I mused on a never submitted idea for a cartoon involving a smart alec child, obviously too clever by half, looking up at one of those kiosks which helpfully promise "Information" and asking the aghast attendant "OK, what's the half life of the pi-meson then?". The CRC Handbook—known to generations of undergraduates simply as the "Rubber Bible"—has the answer to this and countless other questions. The fact that it is in its 76th edition is testimony to the book's usefulness. It is comprehensive, covering just about every area of chemistry and physics that the practising scientist would need. There are chapters ranging from basic constants and units through to biochemistry, passing on the way sections including structural formulae and physical properties of all those organic molecules you thought you'd forgotten, including pesticides and steroid hormones, in an exhaustive list usefully cross referenced by name and synonym index.

The chapter list is impressive—Basic constants, units, and conversion factors, symbols terminology and nomenclature, physical constants of organic compounds, properties of the elements and inorganic compounds, thermochemistry, electrochemistry, and kinetics, fluid properties, biochemistry, analytical chemistry, molecular structure, and spectroscopy, atomic molecular and optical physics, nuclear and particle physics, properties of solids, polymer properties, practical laboratory data, health and safety information, and an appendix of mathematical tables (up to the level of Bessel functions and statistical tables).

Any such compilation must score highly on two counts to be a credible reference book. It must be comprehensive, and the chapter list above is ample demonstration of that. It also has to be accurate and up to date. The list of contributors is extensive, and if those areas where I might have some competence to judge is anything to go by, it also looks of high quality. References are up to date and although the information in such a volume could never replace fully that obtainable from specialist reviews, it is still comprehensive enough and accurate enough to fully justify its reputation as the leading reference work of its kind, and one which no scientific organisation should be without.

As well as in the quality of content and its usefulness in day to day reference, any great reference book also repays moments of idle browsing with the odd gem or two. Did you know that there are 10^8 shakes in a second? Question the precision therefore of the watch of the next person who offers to see you in a couple of these time units. If, despite your better judgement as a trained scientist, you still cling to recipes which call for such apparently ill defined quantities as "tablespoon" and "teaspoon", worry no more. The "Rubber Bible" has definitions, to three decimal places, of each in metric equivalents.

All in all, a work of reference which should be within 10 feet of any self respecting practising scientist. Or would you like that in parsecs?

M L WILLIAMS

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